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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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EXAMINER

BURCH, MELODY-M

ART UNIT PAPER NUMBER

3683

DATE MAILED: 11/23/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

**Office Action Summary**

Application No.

10/711,161

Applicant(s)

HEDERSTIERNA, JOHAN

S

Examiner

Melody M. Burch

Art Unit

3683

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 28 August 2004.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-14 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-14 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 28 August 2004 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some \* c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date 8/28/04.
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_\_.

## DETAILED ACTION

### *Drawings*

1. ~~The drawings are objected to under 37 CFR 1.83(a). The drawings must show~~ every feature of the invention specified in the claims. Therefore, the bearing elements being configured with an outer surface oriented parallel to a central axis of the bearing arrangement as claimed in claims 5 and 6 and the vehicle, two rear axles, two brackets, and two leaf springs recited in claim 14 must be shown or the feature(s) canceled from the claim(s). No new matter should be entered.

Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. The figure or figure number of an amended drawing should not be labeled as "amended." If a drawing figure is to be canceled, the appropriate figure must be removed from the replacement sheet, and where necessary, the remaining figures must be renumbered and appropriate changes made to the brief description of the several views of the drawings for consistency. Additional replacement sheets may be necessary to show the renumbering of the remaining figures. The replacement sheet(s) should be labeled "Replacement Sheet" in the page header (as per 37 CFR 1.84(c)) so as not to obstruct any portion of the drawing figures. If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

***Claim Rejections - 35 USC § 112***

2. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

3. Claims 1-12 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Re: claim 1. The phrase "the spring suspension" in lines 1-2 lacks proper antecedent basis.

Re: claim 5. The phrase "said outer conical, tubular bearing element" in line 2 of claim 5 lacks proper antecedent basis.

Re: claim 6. The phrase "said inner conical, tubular bearing element" in line 2 of claim 6 lacks proper antecedent basis.

The remaining claims are indefinite due to their dependency from claim 1.

***Claim Rejections - 35 USC § 103***

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

5. Claims 1-14 are rejected under 35 U.S.C. 103(a) as being unpatentable over DT-2312864 (DT'864) in view of US Patent 5271678 to Bourgeot.

Re: claims 1, 11, 12, and 13. DT'864 shows in figure 3 a bearing arrangement

for mounting the spring suspension for a leaf-spring-supported bogie on a vehicle, the arrangement comprising: a bracket 12, a leaf spring support 9 and two bearing elements-(left and right elements-10).

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DT'864 lacks the limitation of the each of the bearing elements comprising a plurality of conical coaxial tubular supporting elements and at least one conical tubular liner.

Bourgeot teaches in the figure on the front of the patent the use of a bearing arrangement wherein a bearing element 5 comprises a plurality of conical coaxial tubular supporting elements 6 and at least one conical tubular liner 7.

It would have been obvious to one of ordinary skill in the art at the time the invention was made to have modified the bearing elements of DT'864 to have included a plurality of conical coaxial tubular supporting elements and at least one conical tubular liner, as taught by Bourgeot, in order to provide a means of more effectively resiliently supporting loads. With regards to claim 13 the clamping device is element 17.

Re: claim 2. DT'864, as modified, teach in figure 3 of DT'864 the bearing elements being restrained between the leaf spring support 9 and the bracket 12 with a pretensioning thereby induced in the bearing elements in an axial direction thereof via element 17.

Re: claims 3 and 4. DT'864, as modified, teach in the figure on the front of the patent of Bourgeot the limitation wherein the supporting elements 6 vary in length in the axial direction so that an innermost supporting element shown in the area of 7a is longer than an outermost supporting element shown in the area of 7g.

Re: claims 5 and 6. DT'864, as modified, teach in the figure on the front of the patent of Bourgeot the limitation of the outer conical tubular bearing element and the inner conical tubular bearing element are configured with the outer surface oriented parallel to a central axis of the bearing arrangement to the same extent as Applicant's. (See drawing objection).

Re: claims 7-10. DT'864, as modified, describes the invention substantially as set forth above, but does not include the specific material limitations.

It would have been obvious to one of ordinary skill in the art at the time the invention was made to have modified the supporting elements and liners to have been made of metal or composite material and rubber or plastic, respectively, since it has been held to be within the general skill of a worker in the art to select a known material on the basis of its suitability for the intended use as a matter of obvious design choice. In re Leshin, 125 USPQ 416.

Re: claim 14. DT'864, as modified, describes the invention substantially as set forth above in the rejection of claim 1 including the showing of a rear axles, a bracket, and a leaf spring 1, but does not include the limitation of two axles, two brackets, and two leaf springs. In In re Harza 274F.2d 669,124 USPQ 378 (CCPA 1960) the court held that mere duplication of parts has no patentable significance unless a new and unexpected result is produced. It would have been obvious to one of ordinary skill in the art at the time the invention was made to have modified the assembly of DT'864 to have included multiple axles, brackets, and leaf springs to improve vehicle ride and stability.

6. Claim 14 is rejected under 35 U.S.C. 103(a) as being unpatentable over DT-2312864 (DT'864) in view of US Patent 5271678 to Bourgeot and further in view of US Patent 4763921 to Steiner.

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DT'864, as modified, describes the invention substantially as set forth above in the rejection of claim 1 including the showing of a rear axles, a bracket, and a leaf spring 1, but does not include the limitation of two axles, two brackets, and two leaf springs.

Steiner teaches in the abstract the use of two axles, a pair of leaf springs, and at least two brackets.

It would have been obvious to one of ordinary skill in the art at the time the invention was made to have modified the vehicle of DT'864 to have included a plurality of axles, brackets, and leaf springs, in order to provide a compound axle assembly in order to provide greater vehicle stability.

### ***Conclusion***

7. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. US Patents 2308967 to Kuss, 2001257 to Lecler, and 1992631 to Piquerez , and 1862943 to Saives teach similar bearing arrangements including a brackets, leaf spring supports, and bearing elements.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Melody M. Burch whose telephone number is 703-306-4618. The examiner can normally be reached on Monday-Friday (7:30 AM-4:00 PM).

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If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Charles A. Marmor can be reached on 703-308-0830. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

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mmb

November 17, 2004

Melody M. Burch  
11/17/04